ROOT 2018 Context

Axel Naumann
2017-11-22

Current Team Members

- Kim Albertsson

- Guilherme Amadio

- Bertrand Bellenot

- Philippe Canal

- Olivier Couet

- Enrico Guiraud

- Raphael Isemann

- Lorenzo Moneta

- AN

- Danilo Piparo

- Oksana Shadura

- Enric Tejedor

- Xavier Valls

- Vassil Vassilev

Main Contributors

- Brian Bockelman

- Zhe Zhang

- Sergey Linev

- Marsupial

Role

- ROOT is the warp core of HEP data analysis

  - I/O

  - Math

  - Visualization

  - Interactivity, analysis, documentation

- Not guaranteed - there are competitors!

The Mission

- Need to convince:

  - features

  - robustness

  - simplicity

  - speed

- Good code + good code + good code.

Alive?

Very High Activity

- From OpenHub: "Activity level is relative to all projects on Open Hub. Only a small percentage of projects on Open Hub will display the Very High icon. Many important, highly regarded and popular projects may show lower activity levels"

Commits

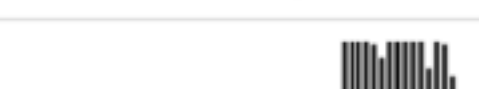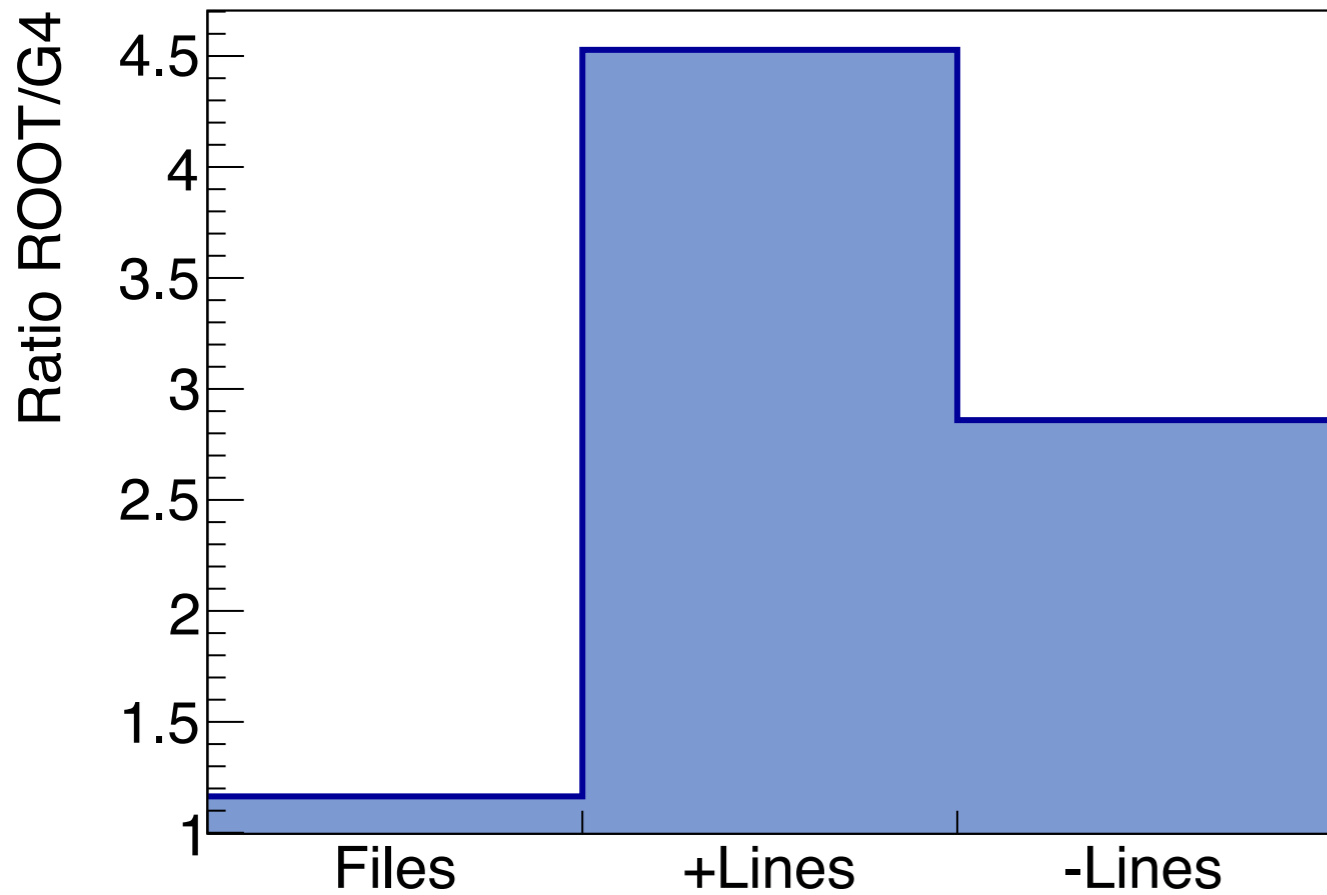|				
Axel Naumann	(8)	768	5191	5 year commit count
Danilo Piparo	(7)	530	1667	5 year commit count
Olivier Couet	(8)	528	3962	5 year commit count
Enrico Guiraud	(1)	450	470	5 year commit count
Philippe Canal	(8)	425	6011	5 year commit count
Vassil Vassilev	(8)	362	2560	5 year commit count
Sergey Linev	(6)	301	536	5 year commit count
Guilherme Amadio	(1)	219	219	5 year commit count
Raphael Isemann	(1)	172	172	5 year commit count
Frederich Munch	(1)	167	310	5 year commit count
Bertrand Bellenot	(7)	162	1482	5 year commit count
Pere Mato	(7)	135	884	5 year commit count
moneta	(1)	96	96	

- Lots. Of. Work.

https://www.openhub.net/p/ROOT/contributors?
query=&time_span=&sort=twelve_month_commits

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Productivity

ROOT/G4

Ratio ROOT/G4

Files +Lines -Lines

ROOT: v6-08..master without interpreter/llvm
G4: 10.02.p03..10.03.p03

ROOT, G4 @ CERN

Persons

STAFF FELL DOCT

ROOT
G4

+ G4 Collab
+ non-CERN ROOT

https://indico.cern.ch/event/673067/contributions/2753984/
attachments/1552806/2441275/SFT-Org-20171106.pdf

Lines Of Code

ROOT/G4
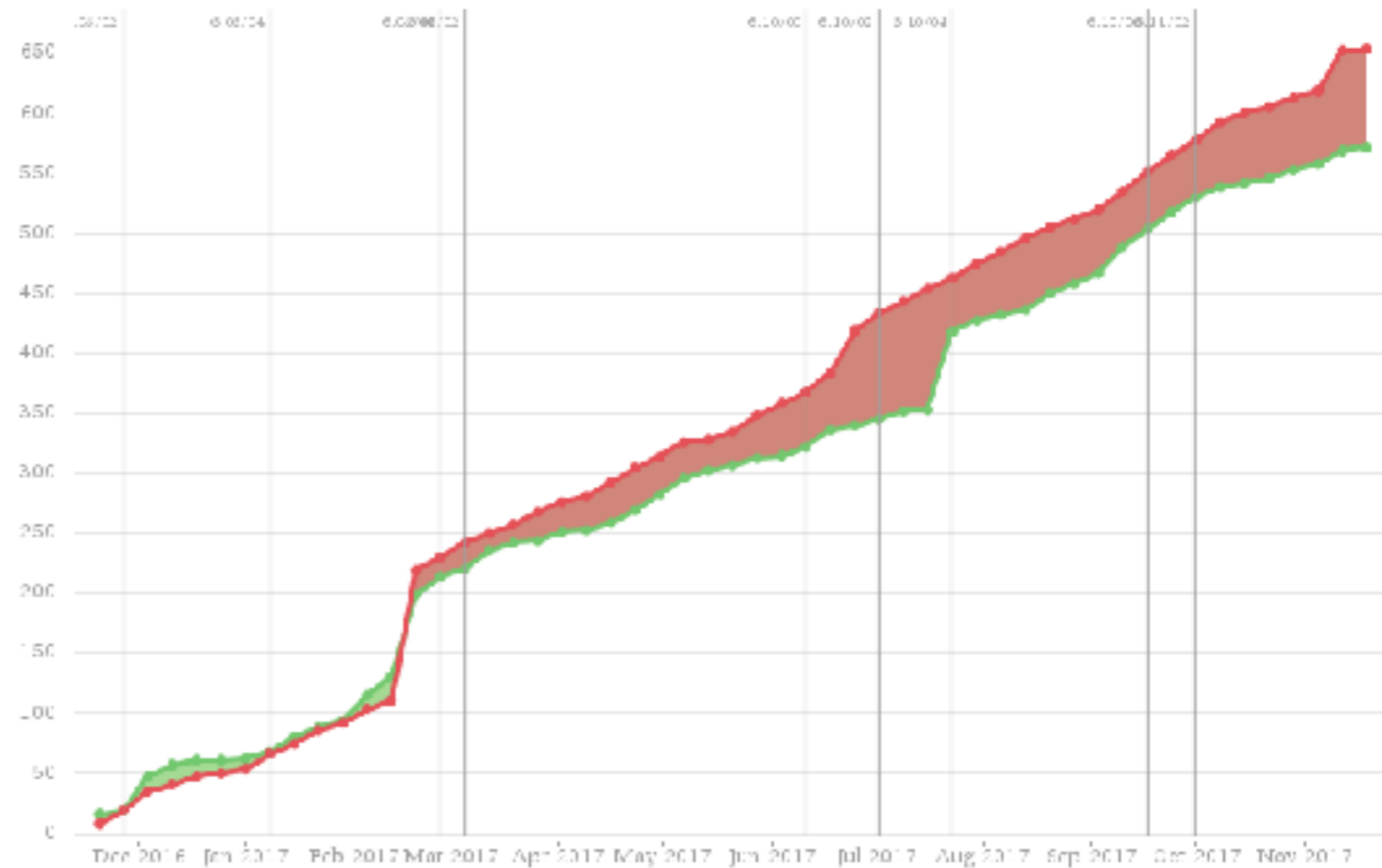
Ratio ROOT/G4

Files   +Lines   -Lines
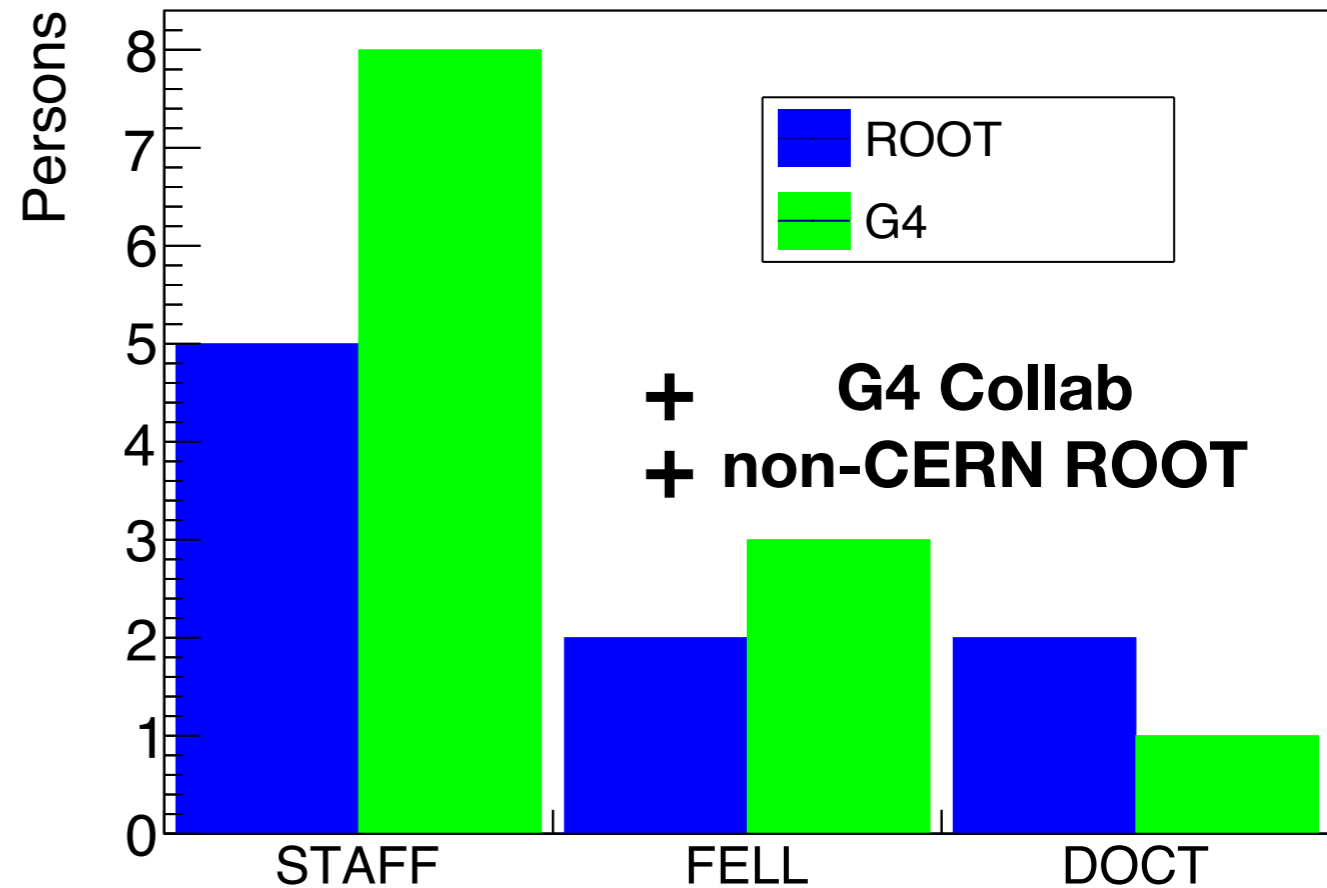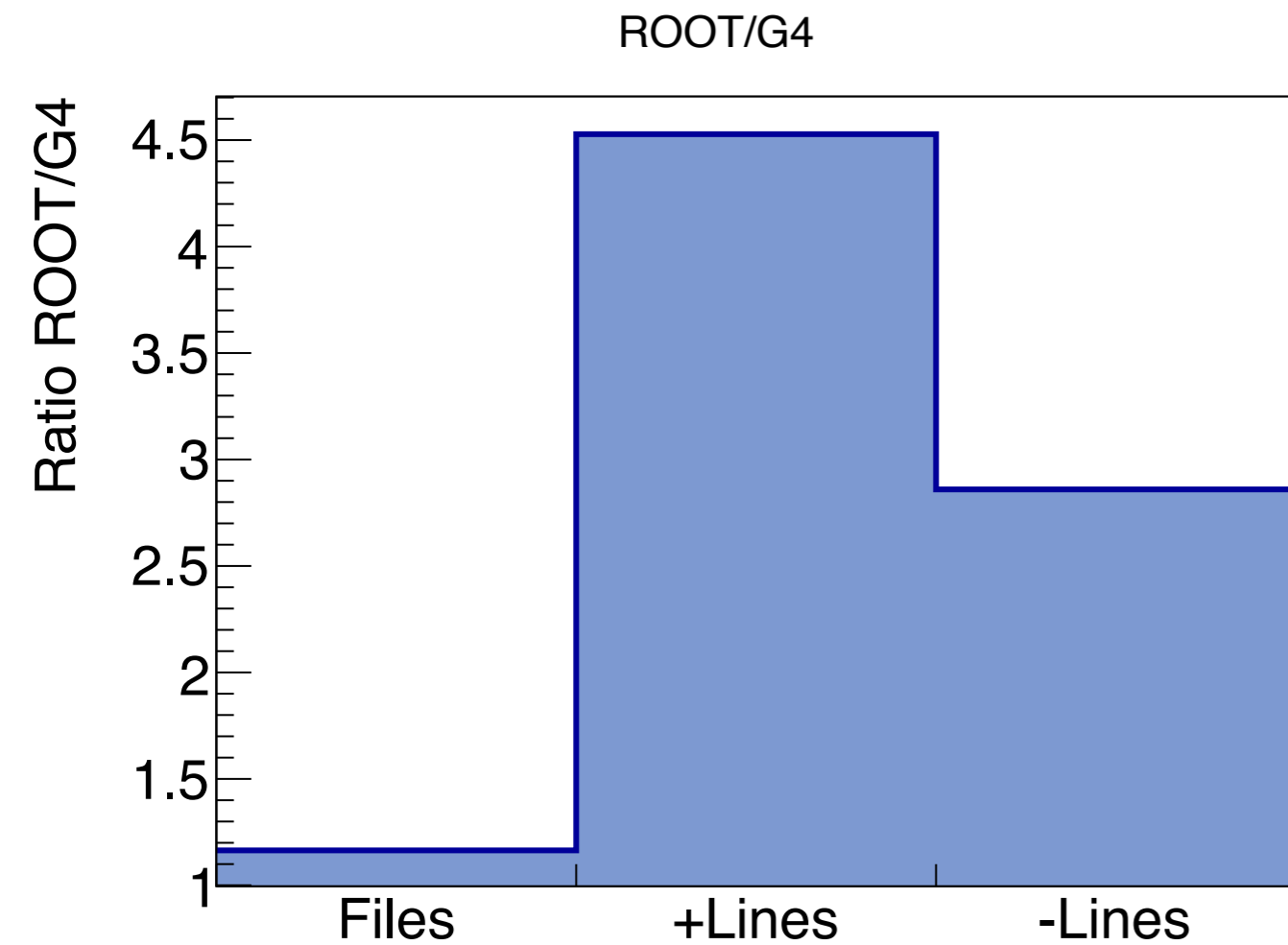
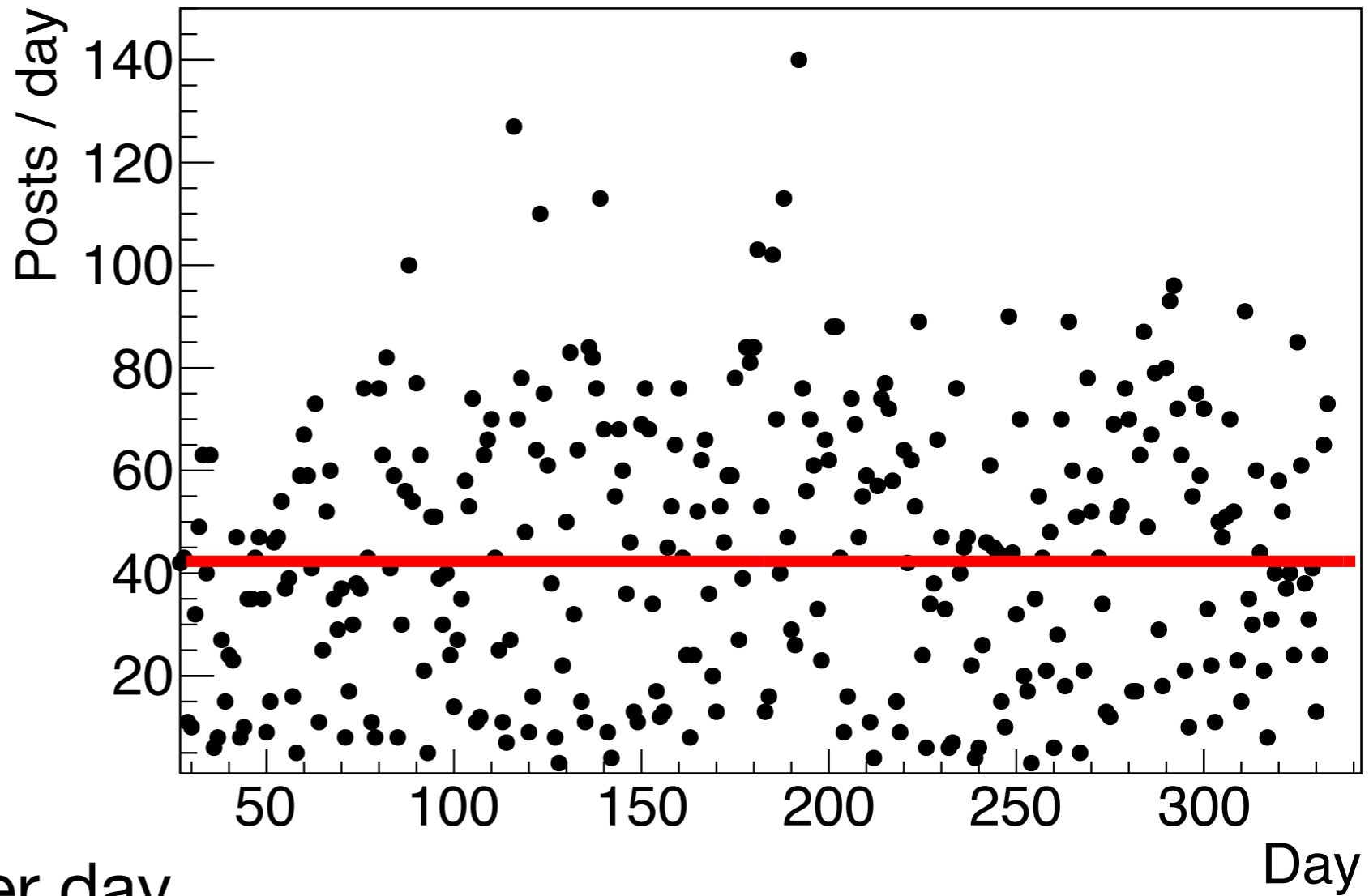- But of course not all lines are equal…

Jira, Coverity

+ backlog of 600 issues

- 1230 open ROOT issues

- + Coverity (about 1000 issues)

Forum

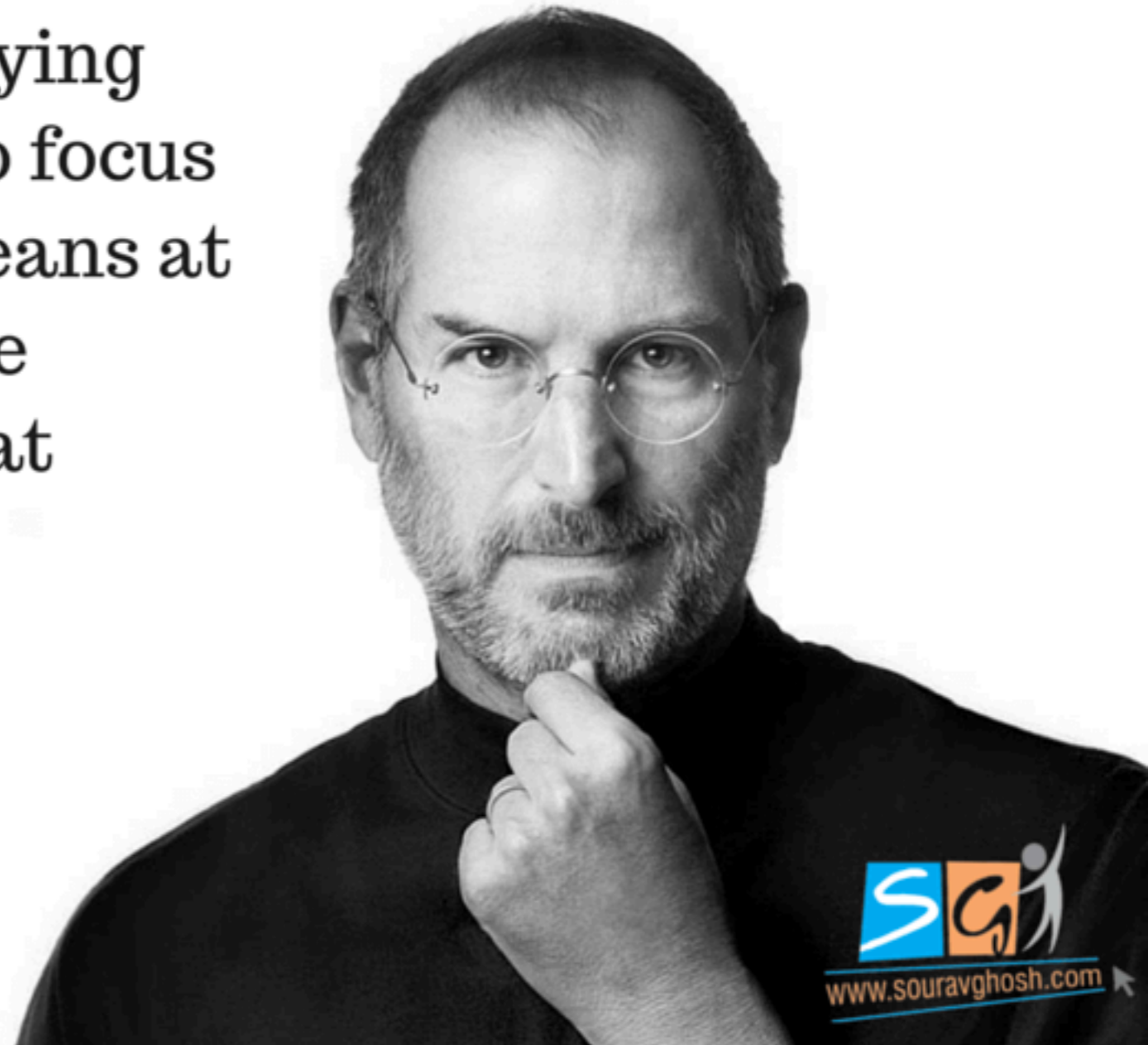- Almost 50 posts per day

- More and more users

Consequence: Focus!

- We have a lot of work to cope with:
  design + discussions, coding, bugs, support, teaching

  - we are very productive, but at the limit

  - and even more is coming: new features, communication

- We must focus on ROOT's core parts:

  - those that arrive at users

  - math, I/O, graphics, interactive, analysis

Consequence: Focus!

People think focus means saying yes to the thing you've got to focus on. But that's not what it means at all. It means saying no to the hundred other good ideas that there are. You have to pick carefully.

Steve Jobs

www.souravghosh.com

2017 PoW

- https://indico.cern.ch/event/598604/contributions/2419269/attachments/1393870/2124204/ROOT-Plans-20170111.pdf

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